



# CHEM-NUCLEAR SYSTEMS INC.

P O Box 726 • Barnwell South Carolina 29812 • (803) 259-1781

## STRAIGHT BILL OF LADING — SHORT FORM — ORIGINAL — NOT NEGOTIABLE. RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading

The property described below in apparent good order, except as noted (contents and condition of contents of packages unknown). Marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination. If on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination. And as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the uniform domestic, straight bill of lading set forth (1) in official Southern Western and Illinois Freight Classifications in effect on the date hereof, if this is a rail or a rail water shipment. Or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

(MAIL OR STREET ADDRESS OF CONSIGNEE — FOR PURPOSES OF NOTIFICATION ONLY)

FROM Umetco Minerals Corp Date 9-19-86

At Alma Falls, New York

CONSIGNEE TO

CNST

DESTINATION

STATE

COUNTY

Barnwell Mgt. Facility, Osborn Rd., SC, USA

Control Number

86-28-25

Tractor No 40

Trailer No 3442

LENGTH

Legal

HEIGHT

Legal

WIDTH

Legal

NO PKGS	HM	KIND OF PACKAGE, DESCRIPTION OF ARTICLES, LINER NUMBERS, SPECIAL MARKS & EXCEPTIONS	*WEIGHT (Sub to Correction)
20	X	Radiation Material, LSA, n.o.s., UN 2912 55 gallon drums containing slag, ore and ferro alloys mixed with soil/cement. Physical form: solid. Chemical form: Oxides. Radionuclides: U 238, Th 232. Total Activity - 2.14 mci. Labeled "RADIOACTIVE MATERIAL LSA, Shipped EXCLUSIVE USE" Leads Placarded "RADIOACTIVE" Leads wire seal affixed to Trailer door.	13,685

IMPORTANT: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Signature

Donald J. Hammer

Company

Umetco Minerals

Date

9/19/86

Received the property described above in good condition, except as otherwise noted.

Carrier

711

Driver

11-20-86

Date and Time

11-20-86

SCHEDULED TO ARRIVE	DATE <u>9-19-86</u>	TIME <u>12:00</u> <u>PM</u>	COMPLETED LOADING	DATE <u>9-19-86</u>	TIME <u>12:00</u> <u>PM</u>	SHIPPER'S SIGNATURE <u>Donald J. Hammer</u>
ARRIVED AT SHIPPER	DATE <u>9-19-86</u>	TIME <u>8:30</u> <u>AM</u>	LEFT SHIPPER	DATE <u>9-19-86</u>	TIME <u>1:00</u> <u>PM</u>	SHIPPER'S SIGNATURE <u>Donald J. Hammer</u>

SHIPPER IMPORTANT NOTE: Your signature certifies that the above dates and times are correct for record keeping and billing purposes.

**SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL  
Radioactive Waste Shipment Prior Notification and Manifest Form**

[Failure to Complete ALL Entries Will Result in Return of Form and Constitute Noncompliance.]

**See Reverse Side for Instructions**

1. Name and Address of Shipper/Generator. Unetco Minerals Corporation 137 - 47th St. Niagara Falls, NY 14303		2. Person Responsible for Waste Shipment. a) Name: D. J. Hansen b) Title: Consultant c) Telephone: (716) 286-4028	
3. Radioactive Waste Transport Permit No. 0226-31-86-X		4. Shipment Identification No.: 09-86-254-A	
5. Location from which waste will be shipped. 137 - 47th St. Niagara Falls, NY 14303		6. Name and Address of Consignee: Barnwell Management Facility, Osborn Rd., Barnwell, SC 29812 Attn: Angie Jones	
7. Scheduled Date of Departure of Shipment: 9/19/86		8. Estimated Date of Arrival of Shipment. 9/21/86	
9. Carrier: CNSI	10. Trailer No. & Owner: (if available) CNSI 3442	11. Type Transport Vehicle: Closed Van	
12. Routes shipment will follow in State of South Carolina (Be Specific): I-77; I-277; I-20; I-26; US Hwy.-321; S.R.-3; S.R.-70; US Hwy.-64			
13. Type Package or Cask Model No.: 55-Gal. Drum	14. Type Container in Cask: N/A	15. Package or Cask Spec.: Strong Tight	
16. Complete Waste Description (Be Specific): a. Mixture of slag and soil b. Metallurgical Samples			
17. Physical & Chemical Form: a. Solid/Metal Oxide b. Solids/slag, ore, ferroalloys		18. Total No. of Packages: 20	19. Prominent Radionuclides Uranium 238 Thorium 232
20. Total Curies: <del>00195</del> 00015 - 00214 Curies		21. Waste Class & Stability A-Unstable	22. Total Cubic Feet: 150
23. DOT Sub Type LSA	24. DOT Class. & Hazard Class UN No.: Radioactive Material; LSA, N.C.S., UN291	25. Hwy. Route Controlled: (Large Quantity) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

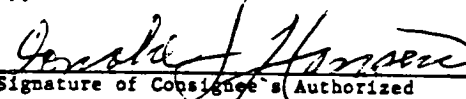
**CERTIFICATION**

I hereby certify on behalf of the above-named shipper/generator to the South Carolina Department of Health and Environmental Control that the information provided herein is complete and correct to the best of my knowledge; and that the shipper/generator has complied with all the provisions as required by Act No. 429 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act, and Department Regulation 61-83.

Date 9/15/86

Donald J. Hansen

Typed Name

  
Signature of Consignee's Authorized Representative

**CONSIGNEE ACKNOWLEDGEMENT**

This acknowledges to the South Carolina Department of Health and Environmental Control that the above-described radioactive waste shipment was received.

Date of Delivery \_\_\_\_\_

Signature of Consignee's Authorized Representative \_\_\_\_\_

Typed or Printed Name and Title \_\_\_\_\_

DEEC 802 (Rev. 10/84)

(Copies of this form may be reproduced locally as needed)

UCCNHT0003272

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL  
Radioactive Waste Shipment Certification Form

**General Instructions and Information:** This is a two part form to be used by shippers and carriers of radioactive waste. The certifications contained herein satisfy the requirements of Section 13-7-150, of Act No. 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act. This certification along with a copy of the prior notification form shall accompany each shipment of radioactive waste into and within the State of South Carolina. The shipper is to complete his portion of the form and present it to the carrier as part of the shipping documents. Upon receipt, the carrier shall complete his portion of the form. Upon delivery of the shipment to the consignee, a copy of this certification form, and a copy of the Prior Notification and Manifest form with the consignee acknowledgement, shall be returned to the Department.

## Part I: Shipper's Certificate of Compliance

1. Name of Shipper and Address: <i>Umetco Minerals Corp.</i> <i>137 47th Street</i> <i>Niagra Falls, NY 14303</i> <i>Telephone No. (716) 286-4028</i>	2. Shipment Identification No. <i>09-86-254-A</i>
	3. Transport Permit No. <i>0226-31-86-X</i>

In compliance with Act No. 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act, I hereby certify on behalf of the above-named shipper to the South Carolina Department of Health and Environmental Control that the above-named shipper has complied with all provisions of Act No. 499 of 1980, and all applicable laws and administrative rules and regulations, both State and Federal, regarding the packaging, transportation, storage, disposal and delivery of such wastes. I further certify that this shipment of radioactive waste has been inspected within 48 hours of the time of departure and that no items of non-compliance with applicable laws, rules or regulations were found.

Date *9-19-86**John A. Bender*  
Typed Name and Title of Agent of Shipper*Donald J. Hansen*  
Signature

## Part II: Carrier's Certification

Name of Carrier and Address: <i>CNSI</i> <i>Osborn Rd., Barnwell, SC 29812</i> <i>Telephone No. (803) 259-1781</i>	2. Shipment Identification No. <i>09-86-254-A</i>
	3. Transport Trailer No. <i>3442</i>
4. Scheduled Date of Departure of Shipment: <i>9-19-86</i>	5. Estimated Date of Arrival of Shipment: <i>9-22-86</i>

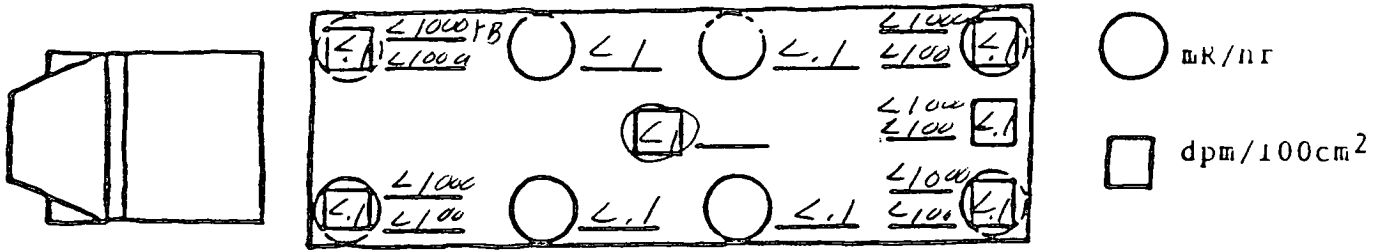
Certification is hereby made to the South Carolina Department of Health and Environmental Control that: (a) the shipper has provided the carrier with a copy of the shipment manifest, the certificate of compliance, and the routing instructions; (b) the shipment of radioactive waste has been properly placarded for transport according to applicable U.S. Department of Transportation Regulations; (c) all shipping papers originated or reproduced by the carrier have been properly executed; (d) the transport vehicle has been inspected according to applicable State and Federal regulations within the prescribed intervals and that all safety and operational components are in good working order and meet the requirements of regulations; (e) all drivers who will operate the vehicle within the State of South Carolina are qualified to transport hazardous materials as specified by applicable U.S. Department of Transportation regulations; (f) the Department shall be immediately notified of any variance, occurring after departure, from the shipper's notification of primary routes in South Carolina and estimated date of arrival; (g) all applicable laws and administrative rules and regulations, both State and Federal, regarding the transportation of radioactive wastes will be complied with.

Date *9/19/86**M. Northcraft Driver*  
Typed or Printed Name and Title*M. Northcraft*  
Signature

Shipment Number 86-28-25

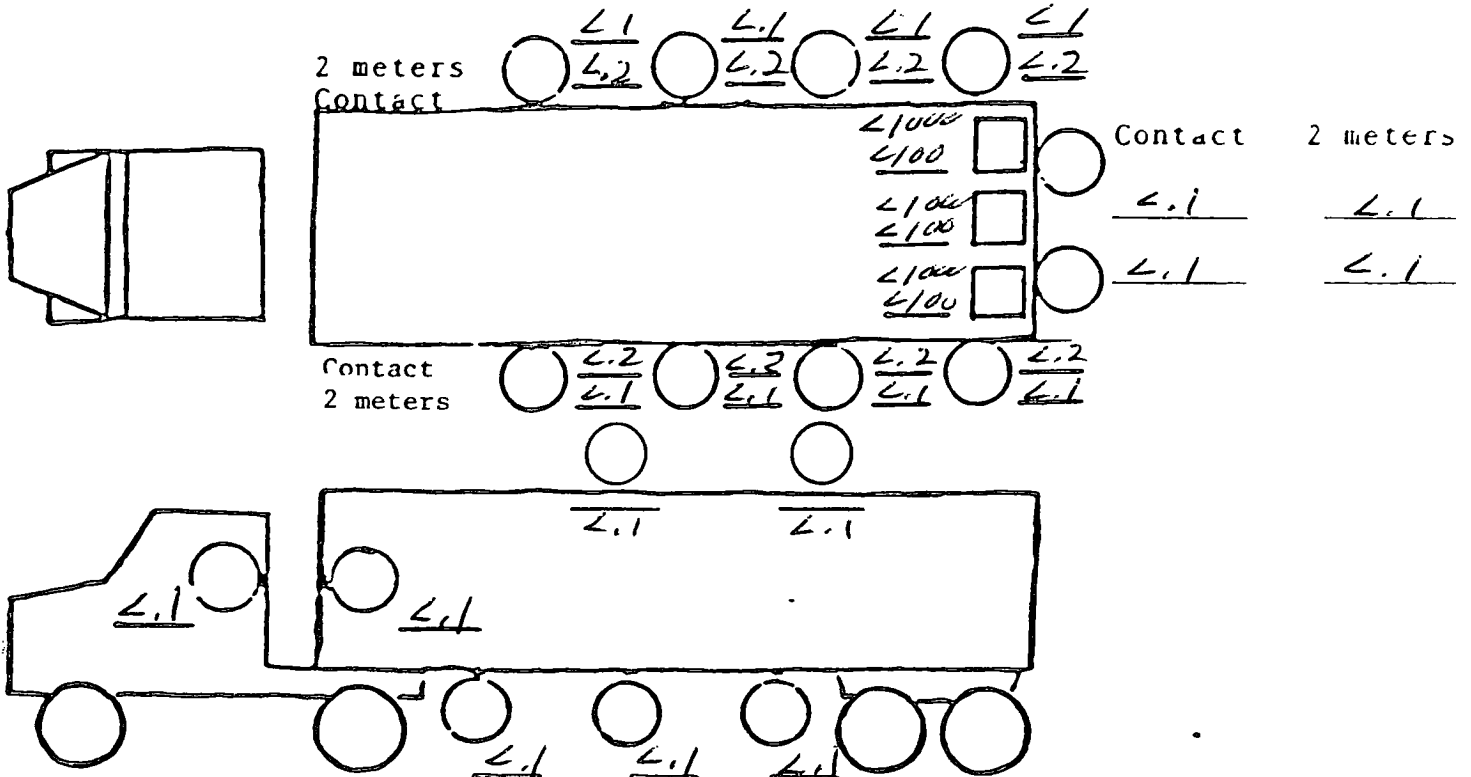
BROKER'S TRAILER SURVEY

Initial Incoming Survey



Vehicle condition: Accept ✓; Reject    

Outgoing Shipment Survey



Survey Performed by: Laellein

Instrument Used: E 520 # 550

Date ~~Calibrated~~: Dec 12-5-86

UCCNHT0003274

BROKERS INVENTORY AND INSPECTION SURVEY OF PACKAGES

Package ID. NO	rir/hr contact	rir/hr @ 1 mtr	Contamin- ation	lb. Weight	Activity IIC <input checked="" type="checkbox"/> mCi	Class ABC-SU	Container Spec.'s	Labeling Marking	Contents Inspected	Loaded
1	<.2	<.1	<1000 <100	680	.106	A4	STC	RAM LSA	9-18-86	9-19
2	<.5	<.1		620	.0959			CLASS A WASTE		
3	<.2	<.1		595	.0917					
4	<.2	<.1		680	.1060					
5	<.1	<.1		690	.1076					
6	<.1	<.1		690	.1076					
7	<.1	<.1		710	.1110					
8	<.2	<.1		720	.1127					
9	<.5	<.1		520	.0790					
10	<.5	<.1		570	.0875					
11	<.5	<.1		590	.0908					
12	<.5	<.1		555	.0849					
13	<.5	<.1		830	.1312					
14	<.2	<.1		755	.1186					
15	<.1	<.1		755	.1186					
16	<.1	<.1		655	.1017					
17	<.1	<.1		655	.1017					
18	<.2	<.1		655	.1017					
19	<.2	<.1		620	.0959					
20	1 mtr/hr	<.1	✓	1140	.19	✓	✓	✓	9-19-86	✓

Survey performed by: Zachlein Shipment # 86-28-25

page one of one

(CNBF-2)

UCCNHT0003275

CNSI DRIVER'S INSTRUCTIONS FOR

EXCLUSIVE USE VEHICLES

Barnwell, S.C.

The Code of Federal Regulations, 49 CFR 173.425 (b)(9) requires that specific instructions for maintenance of exclusive use shipments controls be provided by the shipper to the carrier. These instructions must be included with the radioactive waste shipment document.

The following instructions shall be complied with for all exclusive use vehicles

- o Do not change out tractor before arrival at the radioactive burial site without notifying shipper.
- o Do not change the fifth wheel adjustment on the tractor without notify shipper.
- o Do not move or transfer packages within the van or between vans while enroute to burial site without notifying shipper.
- o The shipment must be loaded by consignor and unloaded by consignee from the transport vehicle in which originally loaded.
- o Shipments must be braced so as to prevent leakage or shifting of load under conditions normally incident to transportation.
- o The vehicle must be placarded "RADIOACTIVE" on all four sides until shipment is unloaded.

If the vehicle is involved in an accident, or is required to make emergency braking which would shift the load and change radiation levels, notify the shipper immediately.

In the case of an accident, vehicle malfunction, or deviation from the above instructions immediately contact one of the following CNSI employees:

Mark Lewis	(803) 256-0450	office
	(803) 794-7726	home
Barnwell Security	(803) 259-1786	
Corporate HP/RSO	(803) 256-0450	

Any deviation from these instructions are violations of State and Federal laws and could result in carrier penalty.

*M Northcraft*  
Drivers Signature

9/19/86  
Date

(CNBF-6)

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